

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450 on:

21 March 2005
Date of Deposit

Our File No. CAL01-001-DIV-US



Paul E. Rauch, Ph.D.

Name

Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Nancy Allbritton, et al.

Serial No. 10/779,917

Filing Date: February 17, 2004

For: Method and Apparatus for Detecting
Cancerous Cells Using Molecules that
Change Electrophoretic Mobility

)
)
)
) Examiner Roseann Kosson
)
) Group Art Unit No. 1651
)
)
)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. § 1.56, Applicants request that citation and examination of the references identified on the attached PTO-1449 form, required copies of which are enclosed herewith in accordance with 37 C.F.R. § 1.98, be made during the course of examination of the above-referenced application for United States Letters Patent.

This application is a divisional application of Serial No. 09/859,650 which is a CIP application of Serial No. 09/658,504 which is a CIP application of Serial No. 09/036,706. Accordingly, information previously submitted to and/or cited by the Examiner (references B1-B13 and B24-B82) is not provided, according to 37 C.F.R. § 1.98(d).

Since this Information Disclosure Statement is being submitted after the mailing of the first Office Action, payment of the fee set forth in 37C.F.R. § 1.17(p) accompanies this submission. The Commissioner is hereby authorized to charge any fees associated with this communication **not covered by credit card payment** or credit any overpayment to Deposit Account No. 50-3123. A duplicate copy of this sheet is attached.

03/24/2005 YPOLITE1 00000041 10779917


01 FC:1806

180.00 0P

Respectfully submitted,

Paul E. Rauch, Ph.D.
Registration No. 38,591

Evan Law Group LLC
566 West Adams
Suite 350
Chicago, Illinois 60661
(312) 876-1400

Form PTO-1449 (Rev. 8-88)		Attorney Docket No. CAL01-001-DIV-US	Serial No. 10/779,917
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)		Applicant: Allbritton, et al	
		Filing Date: February 17, 2004	Group: 1651

U.S. PATENT DOCUMENTS							
Examiner Initials*		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	B1	4,469,098	09/1984	Davi			
	B2	5,071,417	12/1991	Sinofsky			
	B3	5,212,382	05/1993	Sasaki, et al.			
	B4	5,359,615	10/1994	Sasaki, et al.			
	B5	5,393,957	02/1995	Misawa, et al.			
	B6	5,458,761	10/1995	Kamahori, et al.			
	B7	5,498,324	03/1996	Yeung, et al.			
	B8	5,505,831	04/1996	Liao, et al.			
	B9	5,565,171	10/1996	Dovich, et al.			
	B10	5,567,292	10/1996	Madabhushi, et al.			
	B11	5,618,284	04/1997	Zair			
	B12	5,627,643	05/1997	Birnbaum, et al.			
	B13	5,679,536	10/1997	Hayashi, et al.			

FOREIGN PATENT DOCUMENTS								
Examiner Initials*		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	B14	WO01/07910	02/2001	WO				
Examiner			Date Considered					

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Rev. 8-88)	Attorney Docket No. CAL01-001-DIV-US	Serial No. 10/779,917
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Applicant: Allbritton, et al	
	Filing Date: February 17, 2004	Group: 1651

	B15	WO02/42732	05/2002	WO				
--	-----	------------	---------	----	--	--	--	--

Examiner Initials*	OTHER ITEMS - NON PATENT LITERATURE DOCUMENTS Include, as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages	
	B16	Supplementary European Search Report for application no. 0094887.5
	B17	Supplementary European Search Report for application no. 02769700.2
	B18	Abstract - Allbritton, N., et al., "Measurement of Kinase Activation in Single Cells", Molecular Biology Of The Cell, vol. 9, no. Suppl., November 1998, page 230 A, XP008039958 & 38 th Annual Meeting of the American Society for Cell Biology; San Francisco, California, USA; December 12-16, 1998; ISSN: 1059-1524.
	B19	Sims, C., et al., "Laser-Micropipet Combination for Single-Cell Analysis", Analytical Chemistry, American Chemical Society, Columbus, US, vol. 70, no. 21, November 1, 1998, pp. 4570-4577, XP002919395, ISSN: 0003-2700.
	B20	Meredith, G., et al., "Measurement of Kinase Activation in Single Mammalian Cells", Nature Biotechnology, Nature Publishing, US, vol. 18, no. 3, March 2000, pp. 309-312, XP002290903, ISSN: 1087-0156.
	B21	Lee, C., et al., "Localized Measurement of Kinase Activation in Oocytes of Xenopus Laevis", Nature Biotechnology, Nature Publishing, US, vol. 17, no. 8, August 1999, pp. 759-762, XP002185167, ISSN: 1087-0156
	B22	Maru, Y., "Molecular Biology of Chronic Myeloid Leukemia", International Journal of Hematology, vol. 73, no. 3, April 2001, pp. 308-322, XP008040048, ISSN: 0925-5710.
	B23	Baruch, A., et al., "Enzyme Activity - It's All About Image", Trends in Cell Biology, vol. 14, no. 1, January 2004, pp. 29-35, XP002309365, ISSN: 0962-8924.
	B24	Abstract - Kirkpatrick, et al., Energy Res. Abstracts vol. 4, No. 15, Abstr. No. 41711, 1979.
	B25	Abstract - Theis, et al., Clinical Cardiology, vol. 6, No. 8, pp. 396-398, 1983.
	B26	Abstract - Solgonick, et al., Journal of Endourology, vol. 7, No. 5, pp. 371-373, Oct. 1993.
	B27	Abstract - Krasieva, et al., Proc. SPIE - Int. Soc. Opt. Eng., vol. 3260, pp. 38-44, 1998.
	B28	Yang, Q., et al., "Trends in Capillary Electrophoresis: 1977", Journal of Chromatographic Science, vol. 35, pp. 358-372, Aug. 1997.
	B29	Capillary Zone Electrophoresis with Electrochemical Detection in 12.7 um Diameter Columns, Anal. Chem. 1988, 60, Wallingford, et al., pp. 1972-1975.
	B30	Capillary Electrophoresis in 2 and 5 um Diameter Capillaries: Application to Cytoplasmic Analysis, Anal. Chem, 1990, 62, Olefirowicz et al. pp. 1872-1876.
	B31	Microcolumn Separations and the Analysis of Single Cells, Articles, Kennedy et al., pp. 57-63, Oct. 6, 1989.
	B32	Monitoring single-cell pharmacokinetics by capillary electrophoresis, etc. Journal of Chromatography B, 689, 1997, Tong et al., pp. 321-325.
	B33	Discovery of endogenous catecholamines in lymphocytes and evidence for, etc. Proc. Natl. Acad. Sci, USA, Bergquist et al., pp. 12912-12916, Dec. 1994.

Examiner	Date Considered
----------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Rev. 8-88)	Attorney Docket No. CAL01-001-DIV-US	Serial No. 10/779,917
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Applicant: Allbritton, et al	
	Filing Date: February 17, 2004	Group: 1651

B34	Kinetic Perfection in Enzymatic Catalysis: et al., Biochemistry textbook by Stryer, pp. 1995, March 1, 1995
B35	Inositol Trisphosphate and calcium signaling, Nature, vol. 361, 1993 Berridge, pp. 315-325.
B36	A review of In Vitro Studies: Low-Frequency Electromagnetic Fields, American Industrial Hygiene Assoc., Cleary, 1993, pp. 178-185.
B37	A critical review of the genotoxic potential of electric and magnetic fields, Mutation Research, 1993, McCann et al., pp. 61-95.
B38	Formation and resealing of pores of controlled sizes in human erythrocyte membrane, Nature vol. 268, 1997, Kinoshita, JR et al., pp. 438-441.
B39	Electroporation-Induced Formation of Individual Calcium Entry Sites et al. Biophysical Journal vol. 73, 1997, Teruel et al., pp. 1785-1796.
B40	Manipulation of a single cell with microcapillary tubing based on its electrophoretic mobility, Electrophoresis 1995, Kitagawa et al., pp. 1364-1368
B41	Focal Adhesions, Contractility, and Signaling, Annual Reviews Inc. 1996, Burridge et al., pp. 463-519.
B42	Regulation of extracellular matrix synthesis by mechanical stress, Biochem. Cell Biol. 74, 1996, Chiquet et al., pp. 737-744.
B43	Tensegrity: The Architectural Basis of Cellular Mechanotransduction, Annual Reviews Inc. 1997, Ingber, pp. 575-599.
B44	Mechanisms of Intraocular Photodisruption with Picosecond and Nanosecond Laser Pulses, Lasers in Surgery and Medicine 1994, Vogel et al., pp. 32-43
B45	The Interaction of a single laser-generated cavity in water with a solid surface, 1996 Acoustical Society of America, Shaw et al., pp. 2811-2823.
B46	Shock wave emission and cavitation bubble generation by picosecond and nanosecond optical breakdown in water, 1996 Acoustical Society of Am. Vogel, pp. 148-165.
B47	Alteration of cell membrane by stress waves In Vitro, Ultrasound in Med. & Biol., vol. 22, No. 9, 1996, Lee et al., pp. 1285-1293.
B48	Stress-Wave-Induced Injury to Retinal Pigment Epithelium Cells In Vitro, Lasers in Surgery and Medicine 1996, Douki et al., pp. 249-259
B49	Transcellular transport of fluorescein in hepatocyte mono-layers: et al, Proc. Natl. Acad. Sci. USA, vol. 79, Aug. 1982, Barth et al., pp. 4985-4987.
B50	Volumetric Constraints on Injection Size, Practical Capillary Electrophoresis by Weinberger, Jr., pp. 197-200, (1993).
B51	Direct gene transfer into human cultured cells facilitated by laser micropuncture of the cell membrane, Proc. Natl. Acad. Sci. USA, vol. 84 1987, Tao et al pp. 4180-84.
B52	Injection of Ultrasmall Samples and Single Molecules into Tapered Capillaries, Anal. Chem. 1997, Chiu et al., pp. 1801-1807.
B53	Chiu, et al. (1998) "Probing Single Secretory Vesicles with Capillary Electrophoresis." Science 279, pp. 1190-1193.
B54	Craig, et al. (1994) "Monitoring Protein Kinase and Phosphatase Reactions with Matrix-assisted Laser Desorption/Ionization Mass Spectrometry and Capillary Zone Electrophoresis: Comparison of the Detection Efficiency of Peptide-Phosphopeptide Mixtures." Biological Mass Spectrometry 23, pp. 519-528.

Examiner	Date Considered
----------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Rev. 8-88)	Attorney Docket No. CAL01-001-DIV-US	Serial No. 10/779,917
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Applicant: Allbritton, et al	
	Filing Date: February 17, 2004	Group: 1651

B55	Cruz, et al. (1997) "Nitride and nitrate levels in individual molluscan neurons: single-cell capillary electrophoresis analysis." Journal of Neurochem 69, pp. 110-115.
B56	Dawson, et al. (1994) "A Capillary Electrophoresis-Based Assay for Protein Kinases and Protein Phosphatases Using Peptide Substrates." Analytical Biochemistry 220, pp. 340-345.
B57	Erim, et al. (1995) "Performance of a physically adsorbed high-molecular-mass polyethyleneimine layer as coating for the separation of basic proteins and peptides by capillary electrophoresis." Journal of Chromatography A 708, pp. 356-361.
B58	Ewing, A.G. (1993) "Microcolumn separations of single nerve cell components." J Neuroscience Methods 48, pp. 215-224.
B59	Floyd, et al. (1998) "Capillary Electrophoresis Analysis of Nitric Oxide Synthase Related Metabolites in Single Identified Neurons." Anal. Chem. 70, pp. 2243-2247.
B60	Fuller, et al. (1998) "Single Neuron Analysis by Capillary Electrophoresis with Fluorescence Spectroscopy." Neuron 20, pp. 173-181.
B61	Gilman, et al. (1995) "Analysis of Single Cells by Capillary Electrophoresis with On-Column Derivatization and Laser-Induced Fluorescence Detection." Anal. Chem. 67, pp. 58-64.
B62	Giuliano, et al. (1995) "Fluorescent Protein Biosensors: Measurement of Molecular Dynamics in Living Cells." Annu. Rev. Biophys. Struct. 24, pp. 405-434.
B63	Hepala (1997) "Breaking the Barrier: Methods for Reversible Permeabilization of Cellular Membranes." Critical Reviews in Biotechnology 17 (2), pp. 105-122.
B64	Hernandez, et al. (1991) "Laser-induced fluorescence and fluorescence microscopy for capillary electrophoresis zone detection." Chromatography 23, pp. 183-196.
B65	Higashi, et al. (1997) "Imaging of cAMP-dependent kinase activity in living neural cells using a novel fluorescent substrate." FEBS Lett 414, pp. 55-60.
B66	Hofmann (1997) "The potential for isoenzyme-selective modulation of protein kinase C." FASEB J. 11, pp. 649-669.
B67	Hogan, et al. (1992) "Determination of Intracellular Species at the Level of a Single Erythrocyte via Capillary Electrophoresis with Direct and Indirect Fluorescence Detection." Anal. Chem. 64, pp. 2841-2845.
B68	Isbell, et al. (1995) "A Non-radioactive fluorescent method for measuring protein kinase C activity." Life Sciences 57, pp. 1701-1707.
B69	Jankowski, et al. (1995) "Assaying single cells with capillary electrophoresis." Trends in Analytical Chemistry 14 (4), pp. 170-176.
B70	Kennelly, et al. (1991) "Consensus Sequences as Substrate Specificity Determinants for Protein Kinases and Protein Phosphatases." J. Biol. Chem. 266 (24), pp. 15555-15558.
B71	Klann, et al. (1993) "Mechanism of Protein Kinase C Activation During the Induction and maintenance of long-term potentiation probed using a selective peptide substrate." Proc. Natl. Acad. Sci. USA 90, pp. 8337-8341.
B72	Lee, et al. (1992) "Quantitative Determination of Native Proteins in Individual Human Erythrocytes by Capillary Zone Electrophoresis with Laser-Induced Fluorescence Detection." Anal. Chem. 64, pp. 3045-3051.
B73	Lillard, et al. (1995) "Separation of hemoglobin variants in single human erythrocytes by capillary electrophoresis with laser-induced native fluorescence detection." Journal of Chromatography A 718, pp. 397-404.
B74	Lillard, et al. (1997) "Capillary Electrophoresis for the Analysis of Single Cells: Laser-Induced Fluorescence Detection." Handbook of Capillary Electrophoresis. J.P. Landers. Boca Raton, FL, CRC Press, pp. 523-544.

Examiner	Date Considered
----------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Rev. 8-88)	Attorney Docket No. CAL01-001-DIV-US	Serial No. 10/779,917
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Applicant: Allbritton, et al	
	Filing Date: February 17, 2004	Group: 1651

B75	Luzzi, et al. (1997) "Localized sampling of cytoplasm from Xenopus oocytes." Analytical Chemistry 23, pp. 4761-4767.
B76	Miller, et al. (1994) "Enzymatic Profiling of Immobilized Cells Using CZE." Anal. Chem. 66, pp. 2420-2423.
B77	Pihel, et al. (1995) "Electrochemical Detection of Histamine and 5-Hydroxytryptamine at Isolated Mast Cells." Anal. Chem. 67, pp. 4514-4521.
B78	Post, et al. (1995) "A Fluorescent protein biosensor of myosin II regulatory light chain phosphorylation reports a gradient of phosphorylated myosin II in migrating cells." Molec. Biol. Cell 6, pp. 1755-1768.
B79	Regnier, et al. (1995) "Electrophoretically-mediated microanalysis (EMMA)." Trends in Analytical Chemistry 14, (4) pp. 177-181.
B80	Sala-Newby, et al. (1992) "Engineering firefly luciferase as an indicator of cyclic AMP-dependent protein kinase in living cells." FEBS Lett. 307, pp. 241-244.
B81	Tsien (1998) "The Green Fluorescent Protein." Annu. Rev. Biochem. 67, pp. 509-544.
B82	Yeung (1994) "Chemical Analysis of Single Human Erythrocytes." Acc. Chem. Res. 27, pp. 409-414.

Examiner	Date Considered
----------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.